
# Small Business Innovation Research  Small Business Technology TRansfer

Dr. Joseph Grant & Mr. Carlos Torrez | NASA SBIR/STTR Program Overview | 08.16.2018

# The SBIR and STTR Programs

**Small Business Innovation Research (SBIR)**

Small Business set-aside program for Federal R&D – with potential for commercialization

**Small Business Technology Transfer (STTR)**

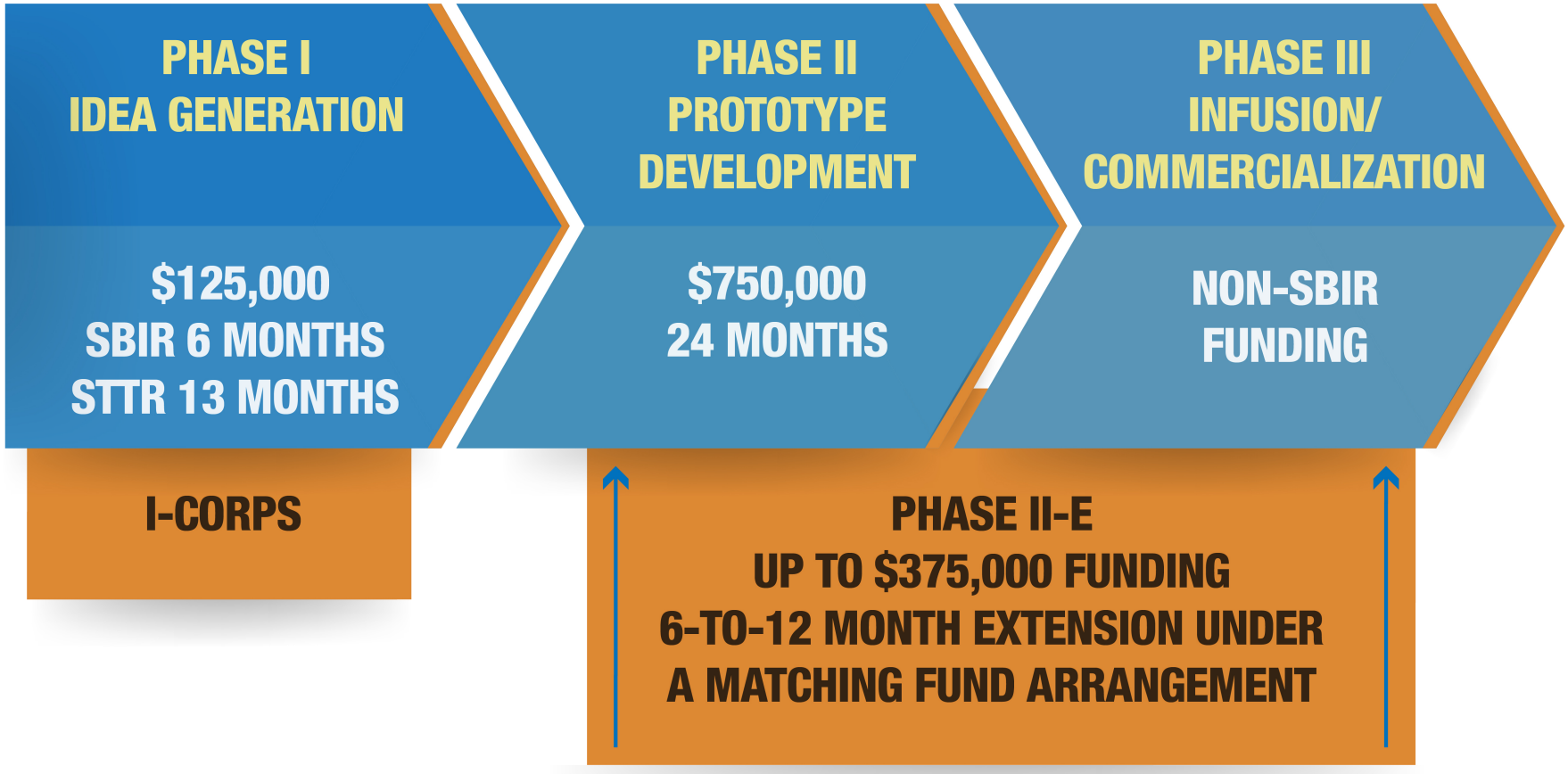
A sister set-aside program to facilitate cooperative R&D between small business concerns and U.S. research institutions – with potential for commercialization

NASA's SBIR and STTR programs have awarded **more than $3.3 billion** to research-intensive American small businesses

Engineers and scientists from **more than 12,000** small businesses in all 50 States, DC and Puerto Rico have participated

# SBIR/STTR Program Structure

## NASA SBIR/STTR PROCESS




Go to sbir.nasa.gov/guide for details

# Learning about NASA's Needs

## Focus Areas

NASA's research subtopics are organized by "Focus Areas" that group interests and related technologies.

- **Identify** the Area(s) closest to your innovation/idea
- **Go** to our website to research
- **Prepare to write** a proposal tailored to NASA's needs

http://sbir.gsfc.nasa.gov/solicit-detail/58007

| 2018 Focus Areas | |
|---|---|
| 1. In-Space Propulsion Technologies | 12. Entry, Descent and Landing Systems |
| 2. Power and Energy Storage | 13. Information Technologies for Science Data |
| 3. Autonomous Systems for Space Exploration | 14. In-Space and Advanced Manufacturing |
| 4. Robotic Systems for Space Exploration | 15. Lightweight Materials, Structures, Assembly, and Construction |
| 5. Communications and Navigation | 16. Ground and Launch Processing |
| 6. Life Support and Habitation Systems | 17. Thermal Management Systems |
| 7. Human Research and Health Maintenance | 18. Air Vehicle Technology |
| 8. In-Situ Resource Utilization | 19. Integrated Flight Systems |
| 9. Sensors, Detectors and Instruments | 20. Airspace Operations and Safety |
| 10. Advanced Telescope Technologies | 21. Small Spacecraft Technologies |
| 11. Spacecraft and Platform Systems | 22. ISS Utilization and Microgravity Research |

# SBIR/STTR Success

## PHASE III SUCCESS

IRIS AO products derived from SBIR funding are available for world-wide distribution by Edmund Optics - approximately $2 million revenue generated annually from the technology developed from NASA SBIR. NASA's SBIR program invested $875,000.

## SNAPSHOT

Since the first exoplanet discovery in 1995, NASA has dedicated resources to develop deformable mirrors for powerful telescopes to determine if there are signs of life beyond Earth on planets outside our  solar system.

## SPECIAL MIRRORS HELP NASA DETECT PLANETS

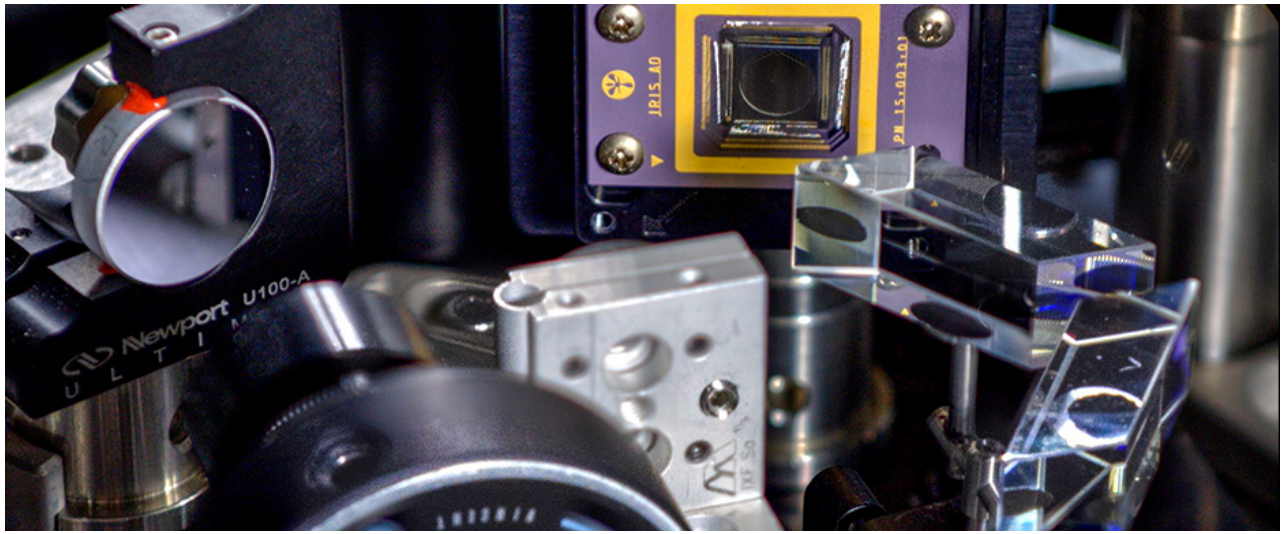
IRIS AO, Inc., Berkley, CA

### Challenge

Starlight can lower the contrast in images sent back to Earth from a telescope traveling in space, making it harder to detect planets light years away.

### Innovation

IRIS AO, Inc. helped NASA to develop deformable mirror (DM) technology that can filter out direct light from stars that limit the visibility of exoplanets. The technology is a key component of starlight blocking instruments on telescopes. The DM is used to correct optical aberrations that otherwise reduce the resolution of an image.



# Contact us and let's innovate together

Website

**www.sbir.nasa.gov**

Sign up for our Newsletter

**https://sbir.nasa.gov/info**

NASA Help Desk

**301.937.0888**

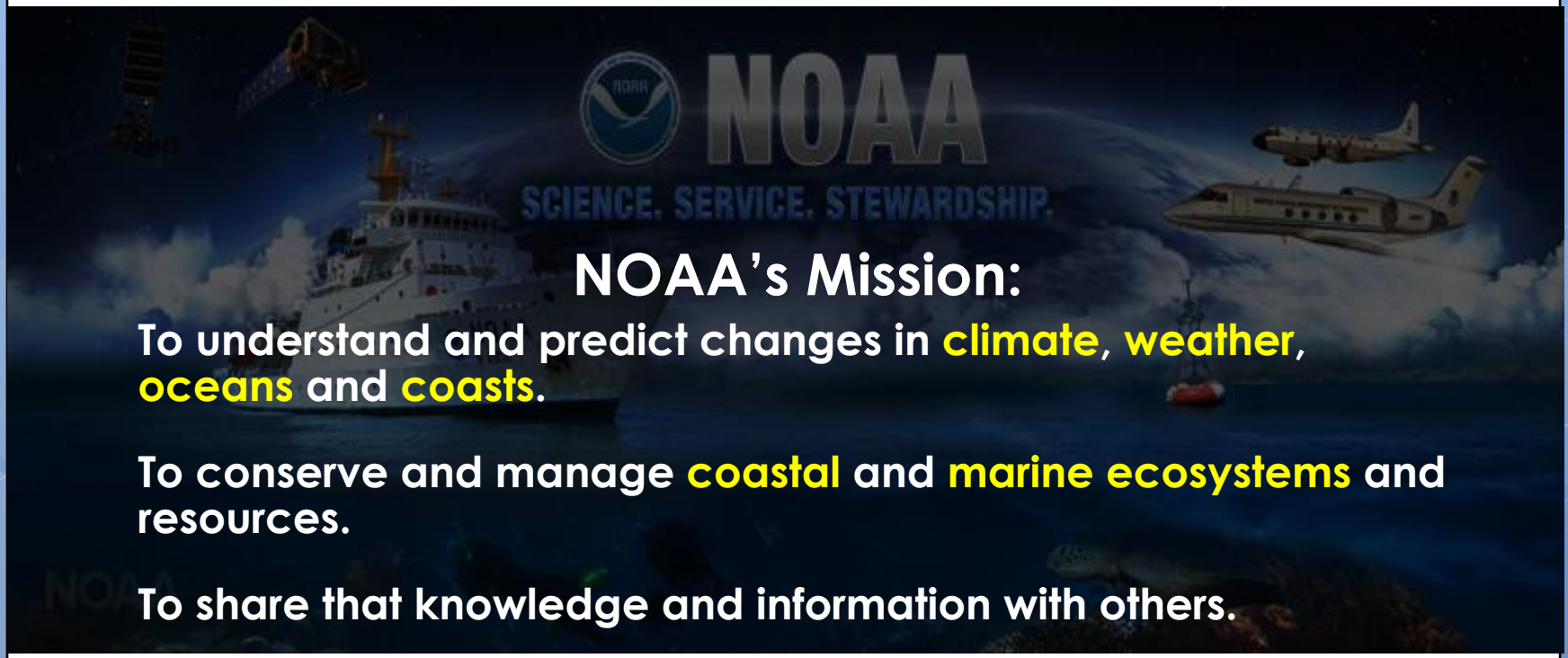
# Small Business Innovation Research Program

SBIR·STTR
America's Seed Fund

Federal Small Business Summit
Honolulu, HI
August 16, 2018

Kelly Wright
Director, Technology
Partnerships Office


NOAA
SCIENCE. SERVICE. STEWARDSHIP.
NOAA
NOAA

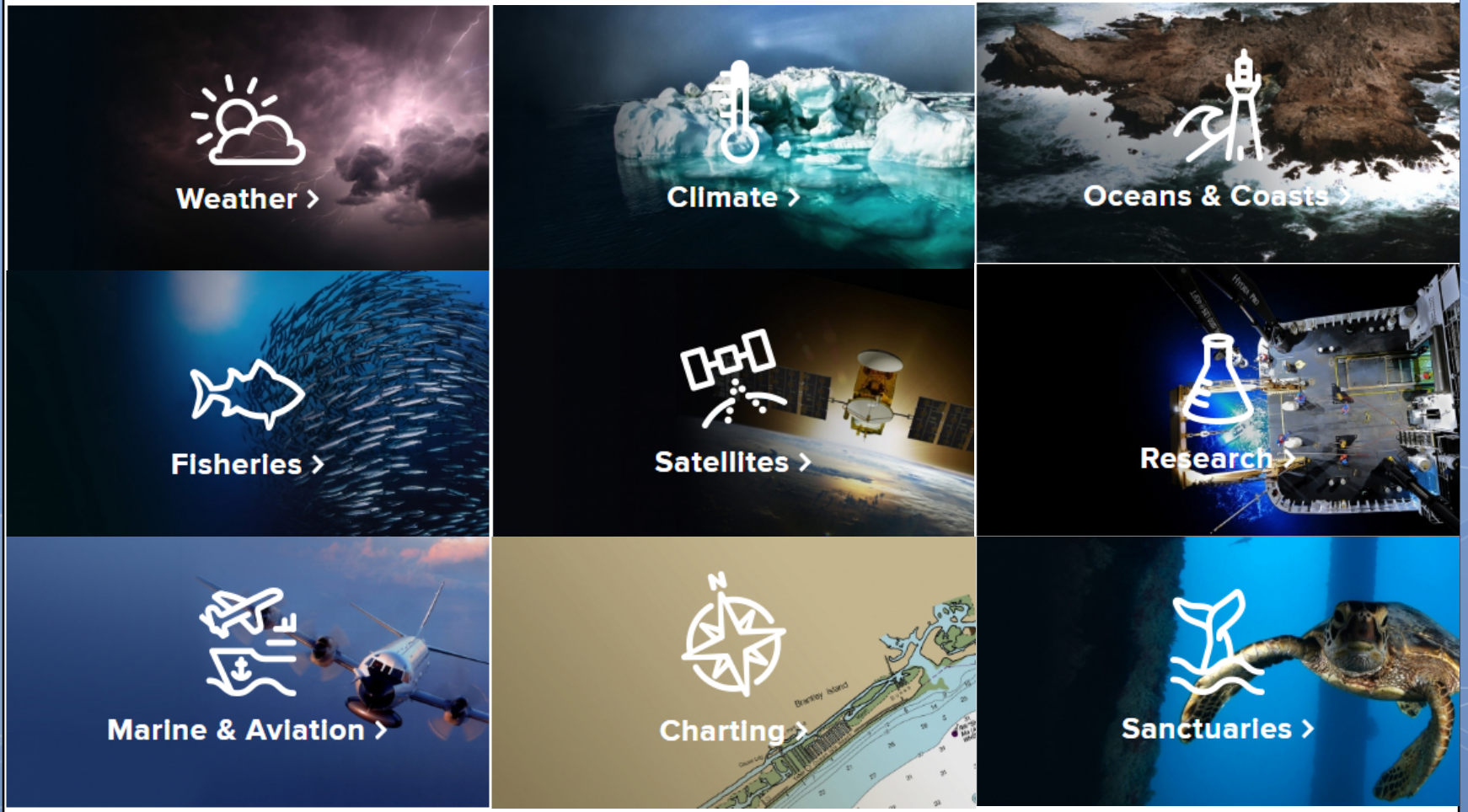



## NOAA's Mission:

To understand and predict changes in climate, weather, oceans and coasts.

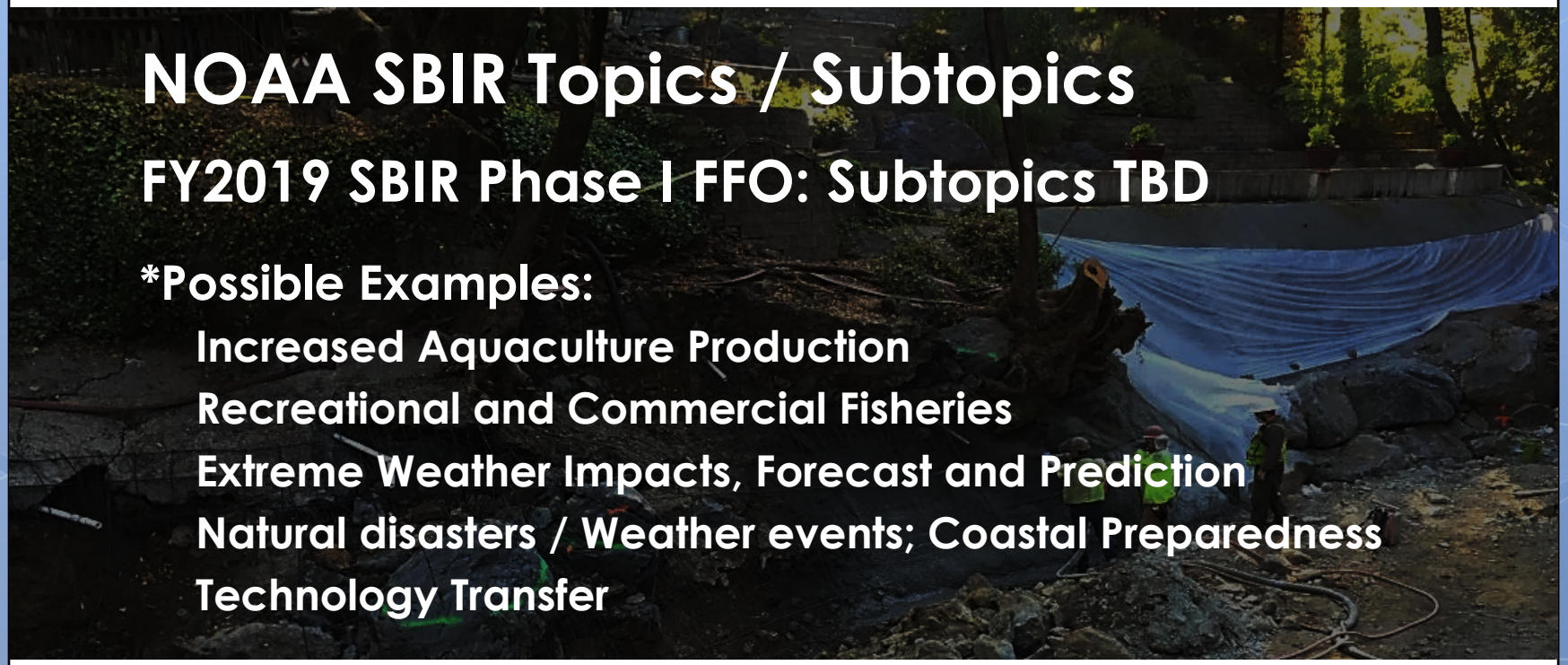
To conserve and manage coastal and marine ecosystems and resources.

To share that knowledge and information with others.


Weather ›
Climate ›
Oceans & Coasts ›
Fisheries ›
Satellites ›
Research ›
Marine & Aviation ›
Charting ›
Sanctuaries ›

# NOAA SBIR Program

| | |
|---|---|
| Awards | Grants (Starting in FY19) |
| Solicitation per fiscal year | One |
| Released | October |
| Proposals due | December/January |
| Available via | grants.gov / DoC Grants-Online |
| Typical Phase I Awards | $120K, Approximately 30 |
| Typical Phase II Awards | $400K, Approximately 20 |
| Commercialization Assistance | Available to Phase II awardees |



# NOAA SBIR Topics / Subtopics

## FY2019 SBIR Phase I FFO: Subtopics TBD

***Possible Examples:**

- Increased Aquaculture Production
- Recreational and Commercial Fisheries
- Extreme Weather Impacts, Forecast and Prediction
- Natural disasters / Weather events; Coastal Preparedness
- Technology Transfer

** These are just examples. Final NOAA SBIR subtopics will be published in the October Federal Funding Opportunity.*

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION OCEANIC AND ATMOSPHERIC RESEARCH

# TECHNOLOGY PARTNERSHIPS OFFICE

Promoting Partnership & Commercialization of NOAA Technology and Innovations

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